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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,958	07/31/2006	Hiroynki Kida	2700/1	6640
27774 7590 09/23/2009 MAYER & WILLIAMS PC 251 NORTH AVENUE WEST 2ND FLOOR WESTFIELD, NJ 07090				
EXAMINER				
AUGHENBAUGH, WALTER				
ART UNIT		PAPER NUMBER		
1794				
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09/23/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/587,958

## Applicant(s)

KIDA ET AL.

## Examiner

WALTER B. AUGHENBAUGH

## Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/88)  
Paper No(s)/Mail Date 01/09/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 4, the scope of structures Applicant intends to recite via the recitation “polyhedron (B) is provided with a stitch on the side” cannot be ascertained. What structure does Applicant intend to positively recite? Note that a “stitch” (piece of fiber) laying on the side of the polyhedron (not even bonded to the polyhedron) reads on this recitation: does Applicant intend to include this embodiment within the scope of the claim? Clarification and/or correction is required.

Furhemore, claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the relationship between the stitch and the polyhedron.

In regard to claim 5, the structure that Applicant intends to recite cannot be ascertained because the language of claim 5 appears to contradict the requirements of claim 1, and the purpose/goal of the invention as a whole. If the “closed chamber” is the “room” of the polyhedron that has the water-absorbent particles “sealed within” it, it seems that the water-

absorbent particles would be incapable of performing the intended function of absorbing water: if the "closed chamber" is sealed, it seems that water would not be permitted inside the "closed chamber" (note the "closed chamber" is also referred to in the claim as the "closed sealed chamber" [line 5], further indicating that water would not be permitted inside the "closed chamber"). If this structure is that structure that Applicant intends to recite, this seems to contradict the purpose/goal of the invention as a whole (and also the limitations of claim 1), so it is likely that this is not what Applicant intends to recite. Clarification and/or correction is required. It seems that the water-absorbent particles should be in the "open chambers", so that the water-absorbent particles would be permitted to absorb water.

In further regard to claim 5, clarification is requested as to the nature of the "heavy solid" (line 6). Is it the water-absorbent particles? Or something else? Furthermore, is the "heavy solid" intended to be a required component of the sealant of claim 5?

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakashima et al. (USPN 4,908,248).

In regard to claims 1 and 8, Nakashima et al. teach a water-swellaable sealant that corresponds to a sealant having the structural and compositional limitations that are positively

recited. See, for example, claims 2 and 1, Fig. 8-23, col. 3, lines 36-42 (describing the embodiments shown in Fig. 8-23 as being composed of rectangular cooling devices [units], also see Fig. 8-23), and col. 3, lines 34-35 (disclosing a crosslinked sodium polyacrylate, which is a polymeric material, as a suitable material for the water-absorbent resin particles (powder is composed of particles)).

In regard to claim 2, the polyhedrons of the embodiments of Nakashima et al. in Fig. 8-23 have at least two planar faces. Fig. 8-23.

In regard to claim 3, the polyhedrons of the embodiments of Nakashima et al. in Fig. 8-23 are rectangular (col. 3, lines 36-42 and Fig. 8-23).

In regard to claim 5, the embodiment of Nakashima et al. in Fig. 23 comprises a plurality of rooms, including rooms that are a closed chamber (those “rooms” not on the top layer of rooms), and open chambers (those rooms on the top layer of rooms as shown in Fig. 23). Any opening in the permeable fabric corresponds to the claimed “feeding mouth”.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima et al. (USPN 4,908,248).

Nakashima et al. teach the sealnat as discussed above.

In regard to claim 4, Nakashima et al. fail to specifically teach that the “polyhedron (B) is provided with a stitch on the side”.

However, Nakashima et al. teach that the polyhedrons are connected, and may be connected together to form such articles as headbands and athletic braces (see, for example, 3, lines 55-65 and Fig. 2, 3 and 13-22). Since stitches are a more than well known means of connecting things together, particularly in fabric articles such as headbands and athletic braces, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the polyhedron/s of Nakashima et al. (of any article, the headband, braces, or otherwise) “with a stitch on the side” as a means of connecting one or more of the polyhedrons together since stitches are a more than well known means of connecting things together.

In regard to claim 6, Nakashima et al. fail to specifically teach that the absorbent particles of Nakashima et al. have the claimed properties. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to also have selected a particular absorbent particle having properties that fall within the scope of the claimed ranges in order to achieve the desired properties depending upon the particular desired end result (for example, how absorbent the particles should be, depending upon the desired intended use of the sealnat).

The selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945); *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious); MPEP 2144.07.

In regard to claim 7, Nakashima et al. fail to specifically teach that the absorbent particles of Nakashima et al. have the claimed property. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to also have selected a particular absorbent particle having a time to increase the weight by 15 kg when immersed in deionized water that falls within the scope of the claimed range in order to achieve the desired degree of water absorbancy depending upon the particular desired end result. The selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945); *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious); MPEP 2144.07.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is (571) 272-1488. The examiner can normally be reached on Monday-Thursday from 9:00am to 7:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Walter B Aughenbaugh /  
Examiner, Art Unit 1794

9/22/09